

PATENT APPLICATION No. 10/661,466
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Amendments to the Claims

Claims

- 1 1. (Original): A quantum information processing platform comprising,
2 a plurality of quantum information processing elements each having,
3 a cage defining a cavity formed from a plurality of self-assembling protein molecules,
4 and one or more cargo elements located within the cavity, wherein
5 at least one of the cargo elements comprises a qubit programmable into a plurality of
6 logical states.
- 1 2. (Original): A quantum information processing platform according to claim 1, wherein the
2 quantum information processing elements comprise,
3 receptors for capturing and positioning the one or more cargo elements within the cavity.
- 1 3. (Original): A quantum information processing platform according to claim 2, wherein
2 the quantum information processing elements comprise,
3 a vesicle located within the cage and enclosing the one or more cargo elements, wherein
4 the receptors extend through the vesicle to capture and position the cargo element within the
5 vesicle.
- 1 4. (Original): A quantum information processing platform according to claim 3, wherein the
2 quantum information processing elements comprise,
3 adaptors disposed between the receptors and the cage and binding to the receptors.
- 1 5. (Original): A quantum information processing platform according to claim 1, wherein the
2 quantum information processing elements comprise,
3 a vesicle located within the cage and enclosing one or more cargo elements.
- 1 6. (Original): A quantum information processing platform according to claim 1, wherein the
2 quantum information processing elements comprise,
3 molecular tethers for capturing and positioning one or more cargo elements within the
4 cavity.
- 1 7. (Original): A quantum information processing platform according to claim 1, wherein the
2 quantum information processing elements comprise,
3 direct cage bonding for capturing and positioning one or more cargo elements within the
4 cavity.